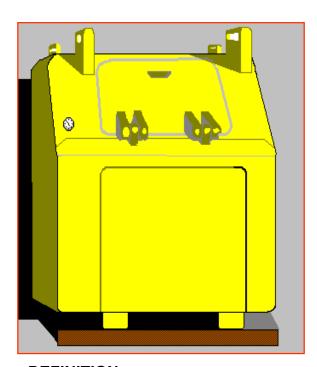
# NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD INTERIM

## FARM ANIMAL MORTALITY FREEZERS

(No.)

#### **CODE 774**



# **DEFINITION**

A freezer unit capable of freezing and storing poultry and other small animal carcasses until such time they can be disposed of in accordance with the farm's approved mortality disposal plan.

# **PURPOSE**

This practice may be applied as part of a conservation management system to provide a suitable disposal method of dead poultry and other small animal carcasses in order to prevent pollution of water, soil, and animal resources. This standard covers the planning and design of on-farm freezers for the disposal of dead poultry or small animals encountered on farms as part of normal farming operations.

# CONDITIONS WHERE PRACTICE APPLIES

This practice applies where current disposal practices of dead poultry or small animals are unsatisfactory and where there is a need to improve sanitation, reduce pollution, recycle dead animals into a feed source, or temporarily store small dead animals until an alternate disposal method is available.

## **CRITERIA**

General. All federal, state, and local laws, rules, and regulations governing waste management, pollution abatement, and health and safety shall be strictly followed. The owner or operator shall be responsible for securing all required permits, approvals, and registration for the operation of the unit in accordance with appropriate laws, rules, and regulations. Required permits must be obtained prior to construction and operation.

**Temperature**. The freezers shall be self contained units designed to freeze animal carcasses before any decomposition can occur and maintain the carcasses at temperatures at or below 20° F. The units must be sealed against weather and air leakage.

Capacity. The required minimum freezer capacity shall be based on the maximum daily weight of animal carcasses during a typical growing cycle. The maximum daily weight of animal carcasses shall be based on mortality data over several growing cycles excluding catastrophic losses. In the absence of specific landowner mortality data, freezer capacity shall be based on similar operations in the local area.

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The required capacity shall be capable of storing and freezing the dead animals based on mortality estimates until such time the animals can be disposed of by an approved method of mortality disposal. The required minimum freezer capacity shall be capable of storing the maximum anticipated mortality between scheduled pick-ups.

**Material**. Freezers installed under this standard shall be constructed of durable material with a life expectancy equal to the planned life of the structure. Freezer containers shall be leak-proof to minimize odor and leachate pollution.

**Location**. To minimize transfer of diseases, freezers shall be located a sufficient distance away from buildings used to house the animals and residences. The minimum distance shall be 150 feet or as recommended by the state veterinarian, whichever is larger.

To ensure visual acceptability of this practice, freezer(s) shall be located to reduce the visibility from nearby residences and from traveled roadways. This may be accomplished using privacy fences or landscaping.

Freezers shall be located near all-weather roads to facilitate the loading and transporting of carcasses from the farm. Where needed, all-weather roads will be constructed to facilitate the equipment used in the removing of carcasses from the freezers. All-weather roads shall meet the requirements of NRCS conservation practice standard Access Road, Code 560.

**Protection**. To provide for structure stability and safety, the freezer shall be located on a firm, level foundation consisting of a concrete pad. The pad shall be at least 4 inches thick.

The freezer shall be located above the 100-year floodplain. Freezers shall be located a sufficient height above normal ground to prevent surface water from posing a problem in the loading or unloading of the units. The site shall be graded to drain or divert all overland runoff safely away from the structure and surrounding work area.

Electrical Installation. Electrical components and installation shall meet the requirements of the National Electrical Code (NEC) and state and local codes for outdoor installation. All electric wiring shall be in a conduit. Installation shall be certified in writing by a qualified licensed electrician or a licensed electrical inspector. All electric wiring shall be in a conduit at the freezer unit.

**Safety**. Highly visible waterproof warning signs, such as "INEDIBLE" or similar signs shall be posted on the facility to identify the use of the freezer. Signs (size, location, color, etc.) shall meet the requirements of any applicable Federal, state, or local laws and regulations.

**Vegetation**. All disturbed areas shall be vegetated in accordance with NRCS conservation practice standard Critical Area Planting, Code 342.

# **CONSIDERATIONS**

Growers should carefully estimate the capacity needed to manage daily mortalities and include other disposal methods in their resource management plan to cover situations in which heavy, unexpected losses occur.

Consideration should be given to providing alternative power generation to the freezer units in case of power failure.

Consideration should be given to the operating cost of the freezer unit. Local fuel cost rates should be used to estimate these expenses.

Due consideration should be given to economics, the overall waste management system plan, and safety and health factors.

#### PLANS AND SPECIFICATIONS

Plans and specifications shall be prepared in accordance with the criteria of this standard and shall describe the requirements for applying the practice to achieve its intended use.

### **OPERATION AND MAINTENANCE**

An operation and maintenance plan shall be developed that is consistent with the purposes of the practice, it's intended life, safety requirements, and the criteria for its design.

Methods for disposing of catastrophic losses must meet all Federal, state, and local rules, laws, and regulations.

Freezers must be operated properly to maximize equipment life and minimize problems.

Temperatures should be monitored regularly to ensure proper operation of freezing carcasses.

The freezer must be loaded according to manufacturer's recommendations and not exceed the design capacity.

Freezers shall only be used for the freezing of dead animals associated with the planned operation.

The freezer must be inspected periodically to ensure that all components are operating as planned and in accordance with the manufacturer's recommendations. To ensure the leak-proof integrity of the containers, freezer containers must be inspected after each transfer of the carcasses to trucks for transport off-site.

The O&M plan shall include, but not be limited to the following:

- Approved method of mortality disposal
- The name and telephone number of the mortality collection service or the rendering plant / recycling plant responsible for handling animal carcasses, if applicable
- Capacity of freezer and schedule for removing carcasses from the freezer(s)
- Freezer operating temperature
- Method of disposal for catastrophic losses
- Contact(s) and phone numbers of person(s) to contact in case of catastrophic losses
- Biosecurity measures

#### REFERENCES

NRCS Conservation Practice Standards:

- Access Road, Code 560
- Critical Area Planting, Code 342

# NATURAL RESOURCES CONSERVATION SERVICE CONSTRUCTION SPECIFICATIONS

# **FARM ANIMAL MORTALITY FREEZERS**

(Each)

#### **CODE 774**

# SCOPE

This specification shall consist of the installation of freezer units including clearing, grubbing, excavation, and backfill required for the construction of a freezer unit foundation pad. Construction shall be performed in such a manner that erosion, water, air, and noise pollution will be minimized and held within legal limits as established by state and federal regulations.

Plans and specifications shall be in accordance with the NRCS's engineering standards for these practices, as well as local building codes and current industry standards.

#### **CLEARING AND GRUBBING**

All trees, brush, stumps, boulders, and rubbish shall be removed from the foundation before the freezer is placed. All material cleared from the area shall be disposed of by burning or burying on-site or hauling to an appropriate landfill. The limits of this grubbing will be as staked in the field.

### **FILL**

Where needed to ensure the freezer unit is located above natural ground, earth material shall be placed to a sufficient height to ensure positive drainage from the structure. Fill material shall be placed at the lowest point of the foundation in approximately horizontal layers not exceeding 8 inches loose thickness. These layers shall be reasonably uniform in thickness and shall extend over the entire area of the fill. Compaction shall be achieved by passing the construction

equipment (earthmoving equipment or compaction equipment) a minimum of 4 passes over each layer of fill.

All finished work shall be left in a neat and sightly condition. The area adjacent and in the immediate vicinity of the structure shall be shaped to blend with the natural surroundings and to complement the structure and work area around it. Shaping shall be in such a way as to drain or divert all overland runoff safely away from the structure and surrounding work area.

#### **FOUNDATION**

The freezer unit shall be placed on a firm foundation as recommended by the manufacturer.

<u>Concrete</u>. Design of the concrete used as the foundation support for the freezer unit shall consider the required performance, the critical applied loads, and the subgrade material. Where applied point loads are minimal and the subgrade is uniform and dense, the minimum slab thickness shall be 4 inches.

The minimum recommended size of the concrete pad is 8 ft. x 8 ft.

#### **VEGETATION**

All disturbed areas around the structure, including spoil areas, shall be vegetated in accordance with NRCS conservation practice standard Critical Area Planting, Code 342.

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